GALALA UNIVERSITY
Powered by Arizona State University

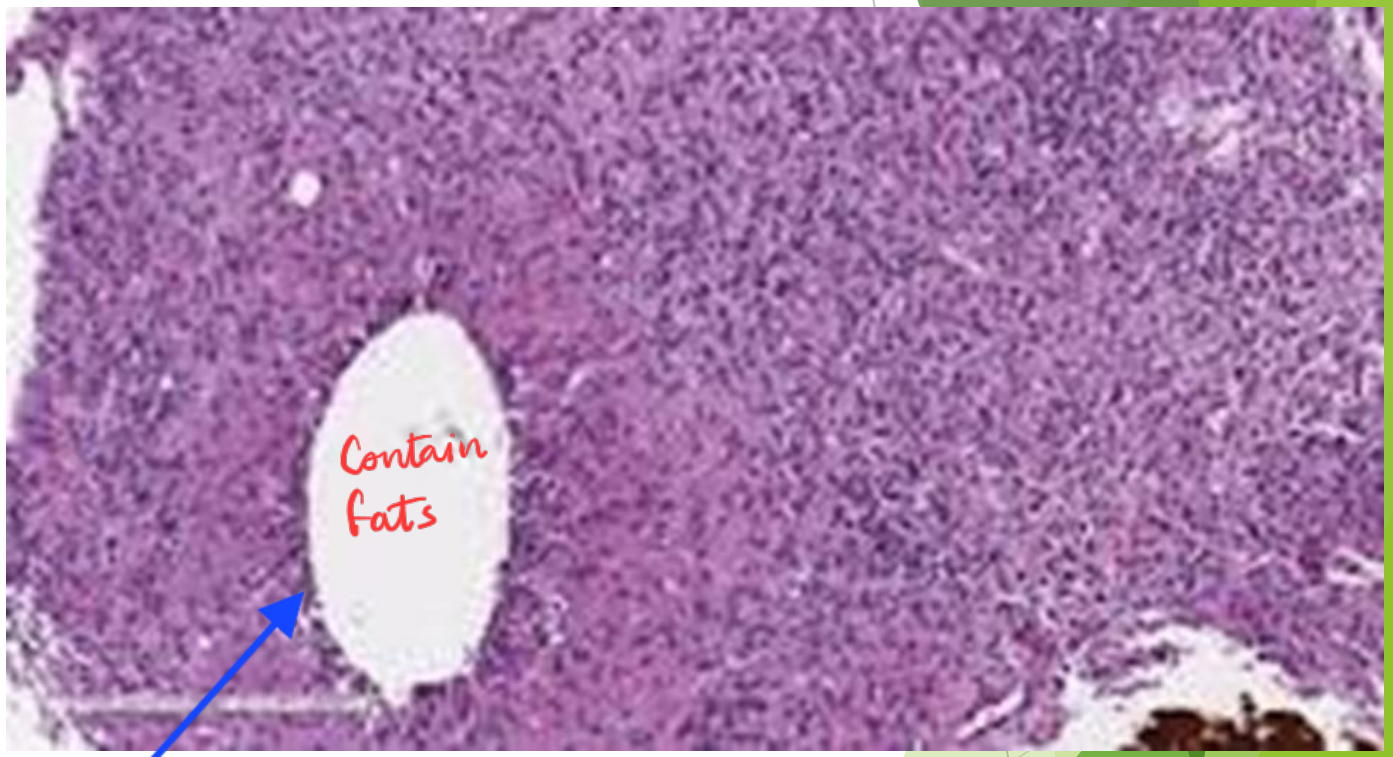
Special senses Pathology Module 302 LAB

Dr. Mohammed Abdellah (MD).

CHALAZION

M/E:

The chalazion gives the appearance of a chronic inflammatory granuloma contains fat globules in the centre of the granulomas i.e. appearance of a lipogranuloma.



CHALAZION

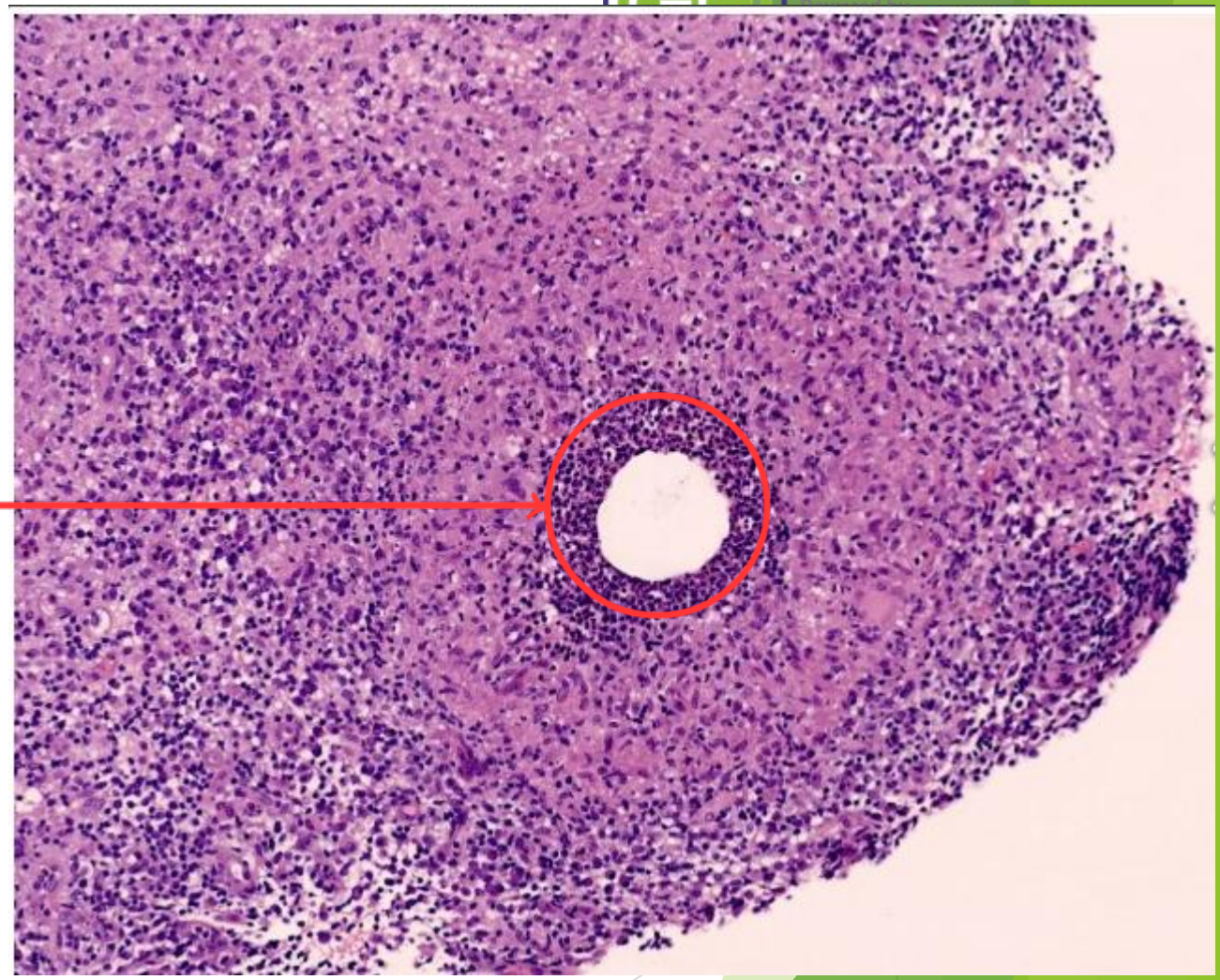
M/E:The chalazion gives the appearance of a chronic inflammatory granuloma withfat globules in the centre of the granulomas

i.e. appearance of a lipogranuloma.

Lipogranuloma (empty spaces surrounded by epithelioid and foamy histiocytes with multinucleated giant cells)

Some lesions have granulation tissue, fibrosis or suppurative inflammation

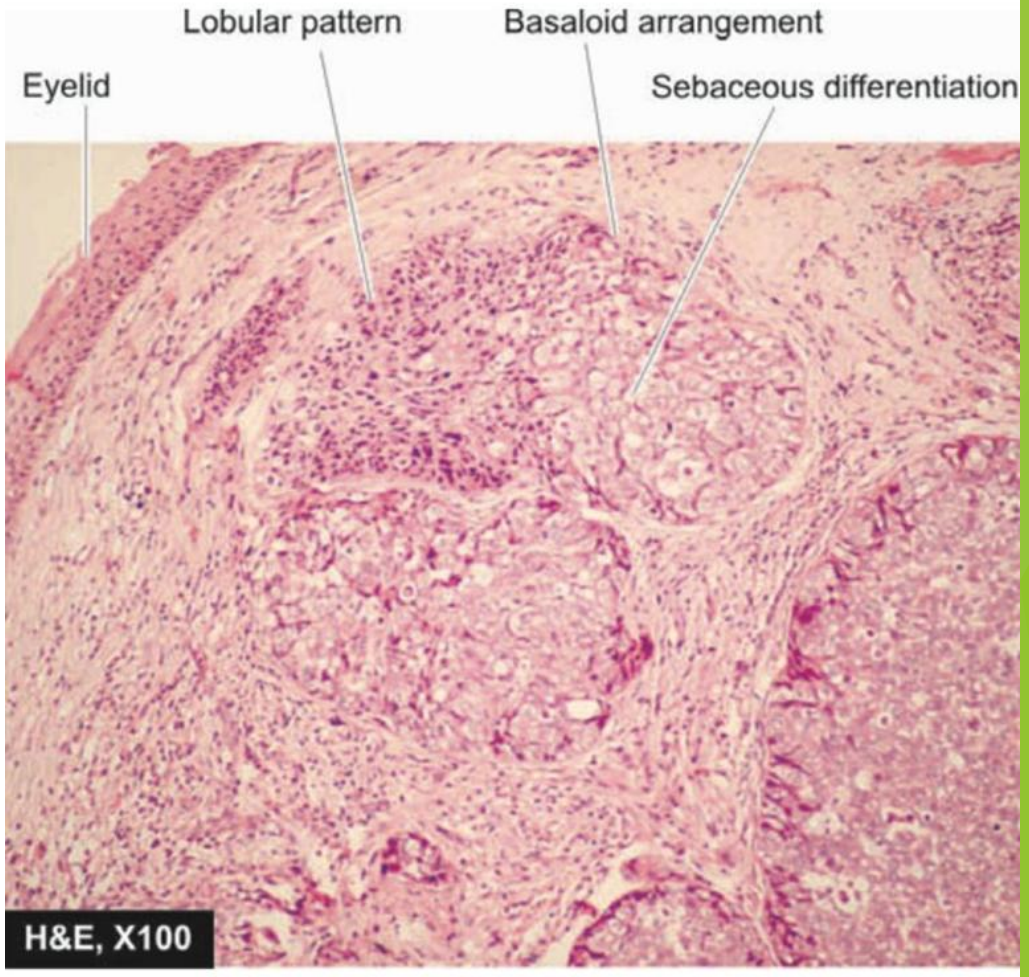
Early lesions can have necrotizing (neutrophilic) granulomas



SEBACEOUS CARCINOMA
Malignant neoplasm with sebaceous differentiation

- M/E:

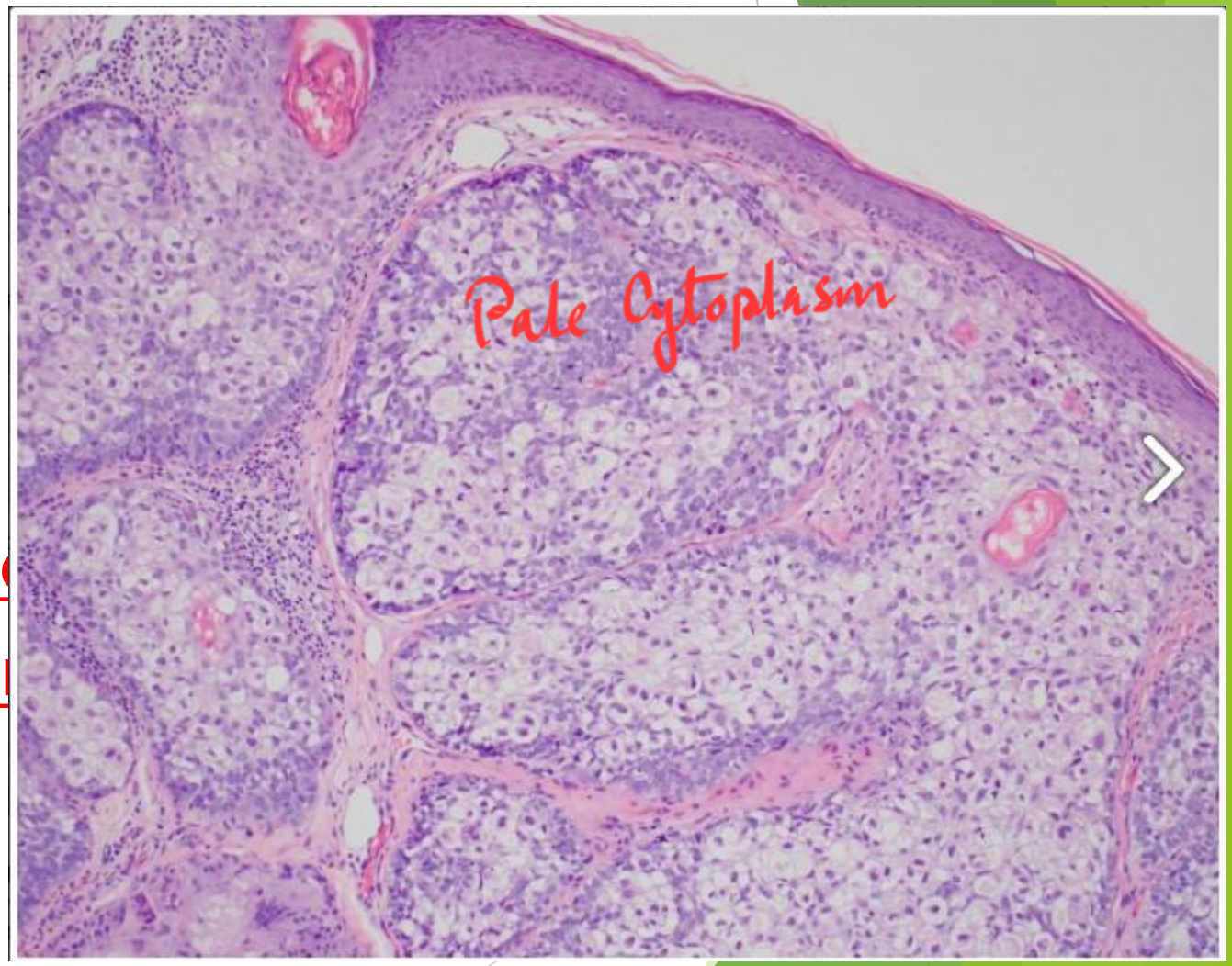
The tumour shows well-differentiated lobules of tumour cells with sebaceous differentiation, arranged in lobules with peripheral basaloid Cells and pale cells in the centre.



SEBACEOUS CARCINOMA

- M/E:

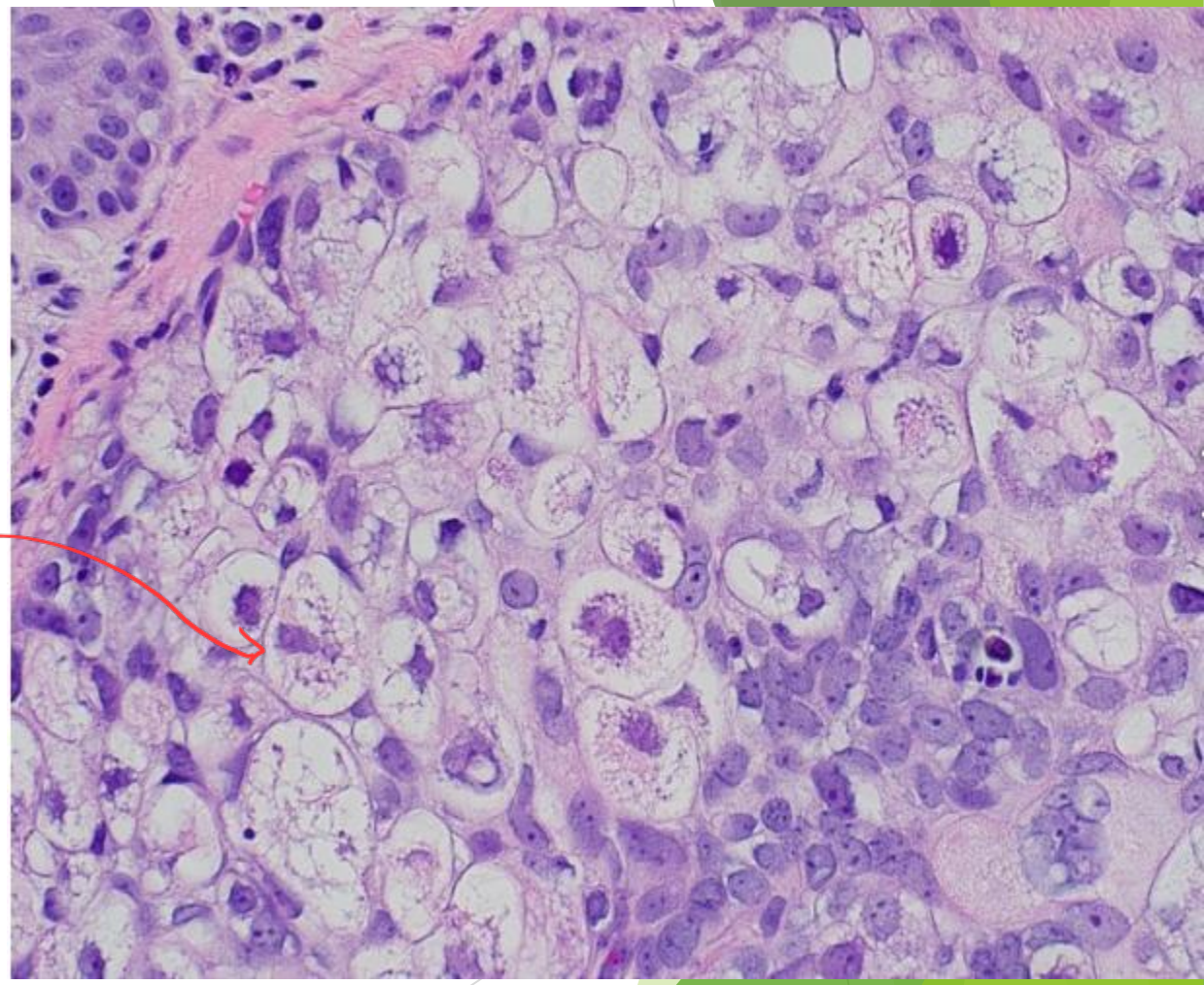
The tumour shows well-differentiated lobules of tumour cells with sebaceous differentiation, arranged in lobules with peripheral basaloi
Cells and pale cells in the centr



SEBACEOUS CARCINOMA

- M/E:

Well differentiated sebaceous carcinoma characterized by a high proportion of multivacuolated cells that exhibit nuclear indentation, pleomorphism and mitoses.



UVEAL MALIGNANT MELANOMA

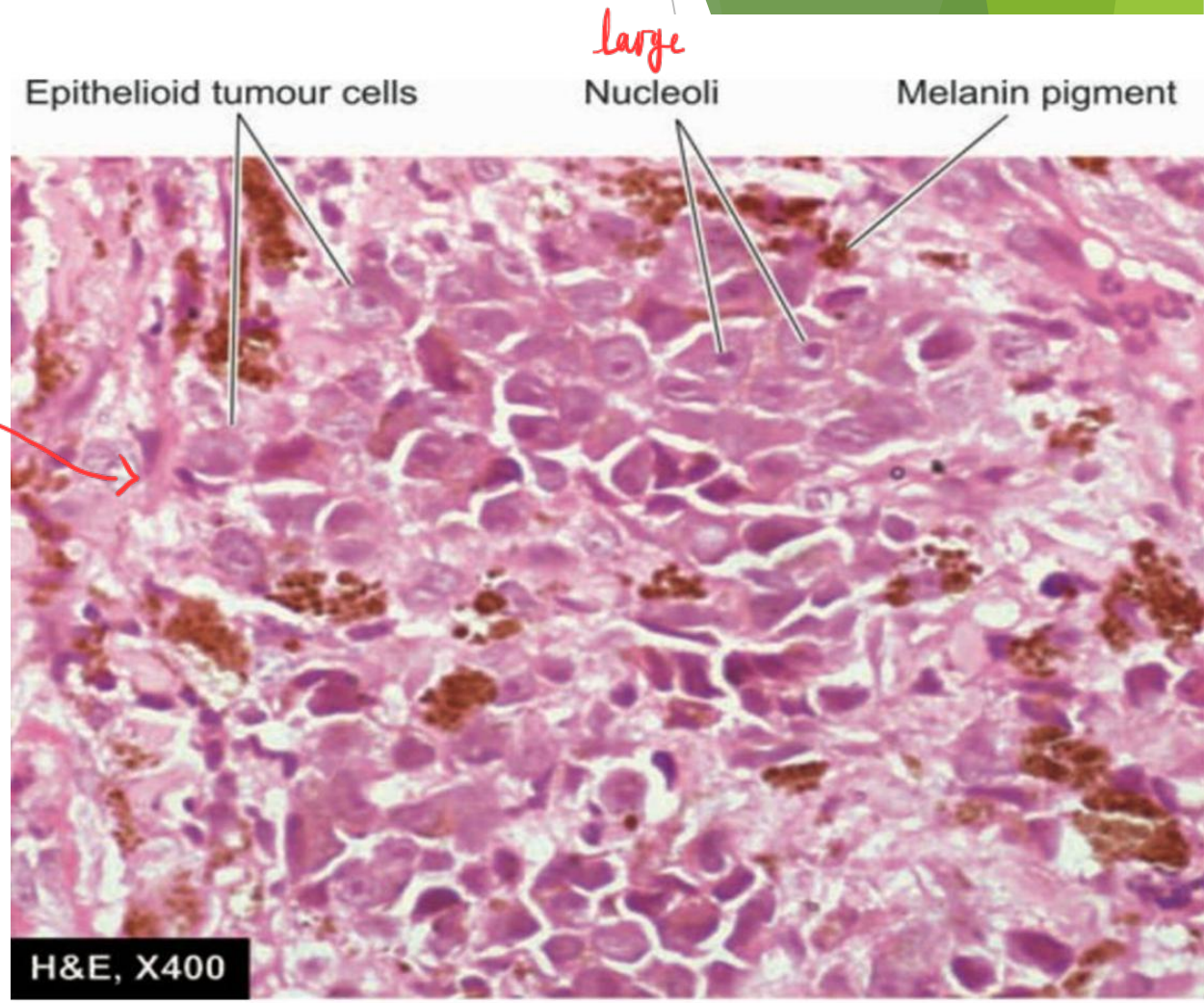
- Malignant melanomas arising from neural crest-derived pigment epithelium of the uvea
- G/A appears as a pigmented mass, most commonly in the posterior choroid, and less often in the ciliary body and iris.
- The mass projects into the vitreous cavity with retina covering it
- M/E:

1. Spindle A melanoma
2. 2. Spindle B melanoma: is composed of larger and plump spindle-shaped cells
3. 3. Epithelioid melanoma consists of larger, irregular and pleomorphic cells with larger nuclei and abundant acidophilic cytoplasm These tumours are the most malignant of the uveal melanomas and have poor prognosis (35% 10-year survival).
4. 4. Mixed cell type melanomas: have features of spindle cell type as well as of epithelioid cell type.

UVEAL MALIGNANT MELANOMA

- M/E:

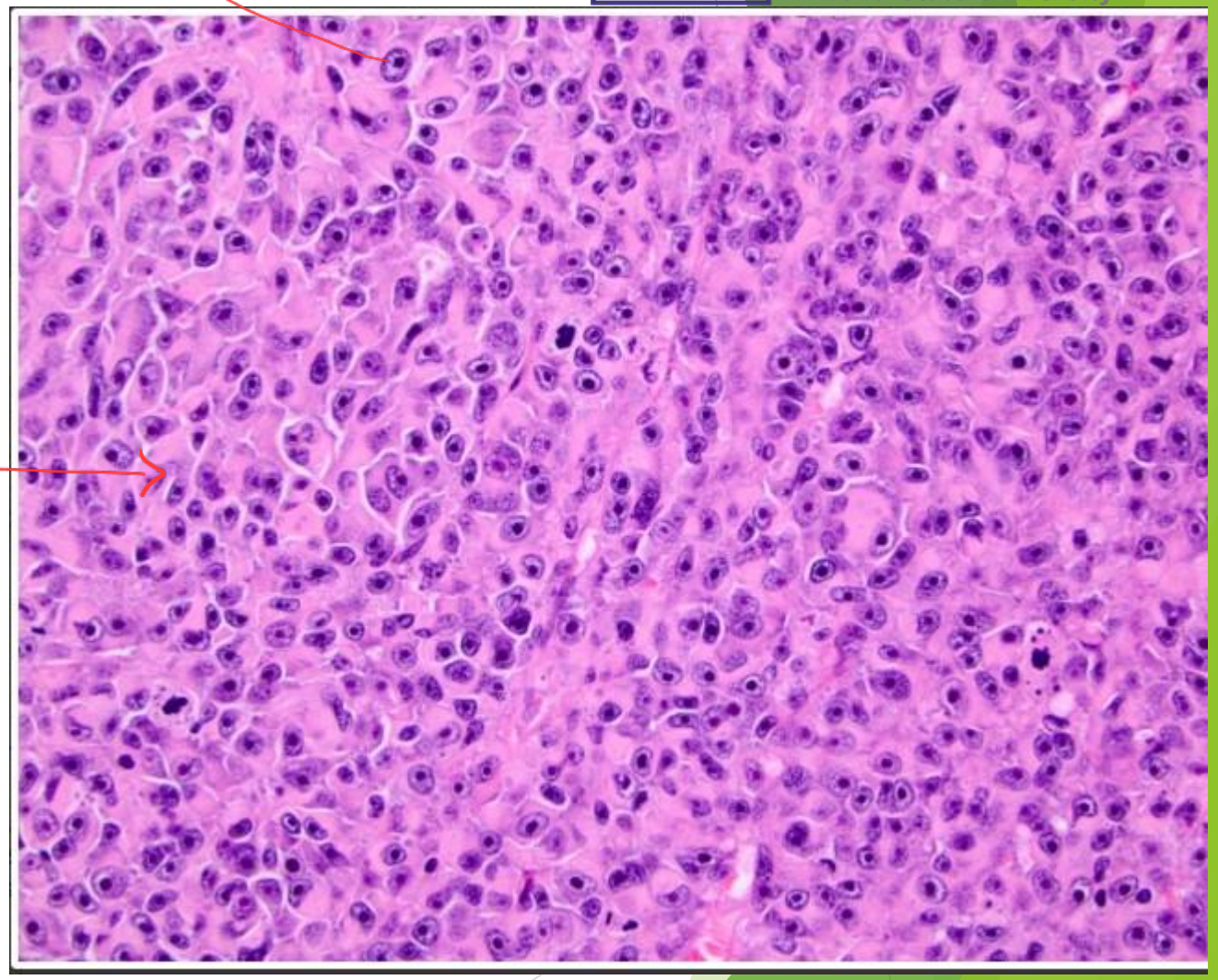
consists of larger, irregular and pleomorphic cells with larger nuclei and abundant acidophilic Cytoplasm and melanin pigment..



UVEAL MALIGNANT MELANOMA

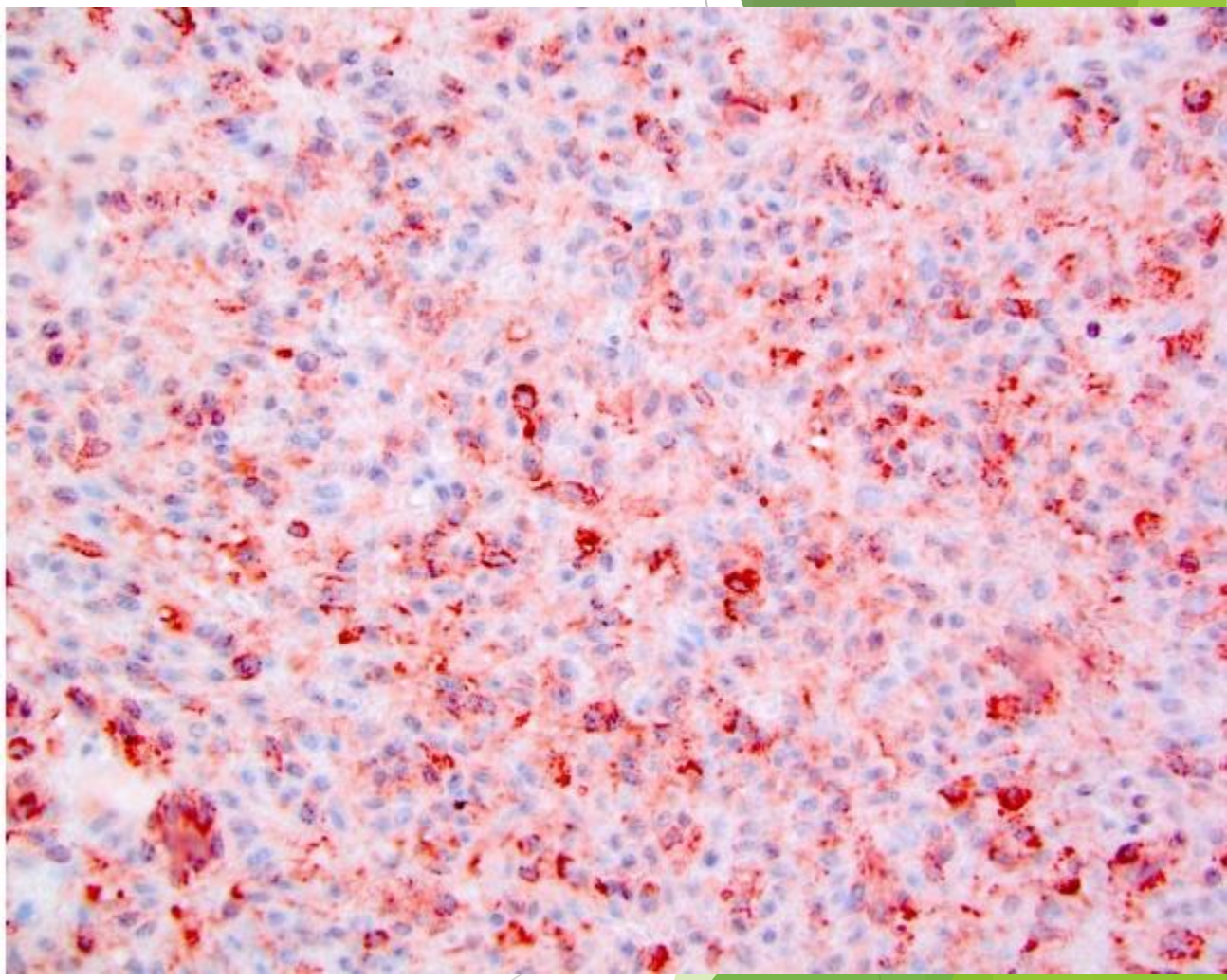
- M/E:

consists of larger, irregular epithelioid cells with larger nuclei and abundant acidophilic Cytoplasm and melanin pigment.



UVEAL MALIGNANT MELANOMA

- M/E:
- HMB45+ malignant cells



RETINOBLASTOMA

. The most common malignant ocular tumour in children.

-**G/A** : a white mass within the retina which may be partly solid and partly necrotic. The tumour may be endophytic when it protrudes into the vitreous, or exophytic when it grows between the retina and the pigment epithelium

M/E: The tumour is composed of undifferentiated retinal cells with tendency towards formation of photo-receptor elements. In the better differentiated area, the tumour cells are characteristically arranged in rosettes.

The rosettes may be of 2 types—Flexner-Wintersteiner rosettes characterised by small tumour cells arranged around a lumen with their nuclei away from the lumen and Homer-Wright rosettes having radial arrangement of tumour cells around the central neurofibrillar structure.

RETINOBLASTOMA

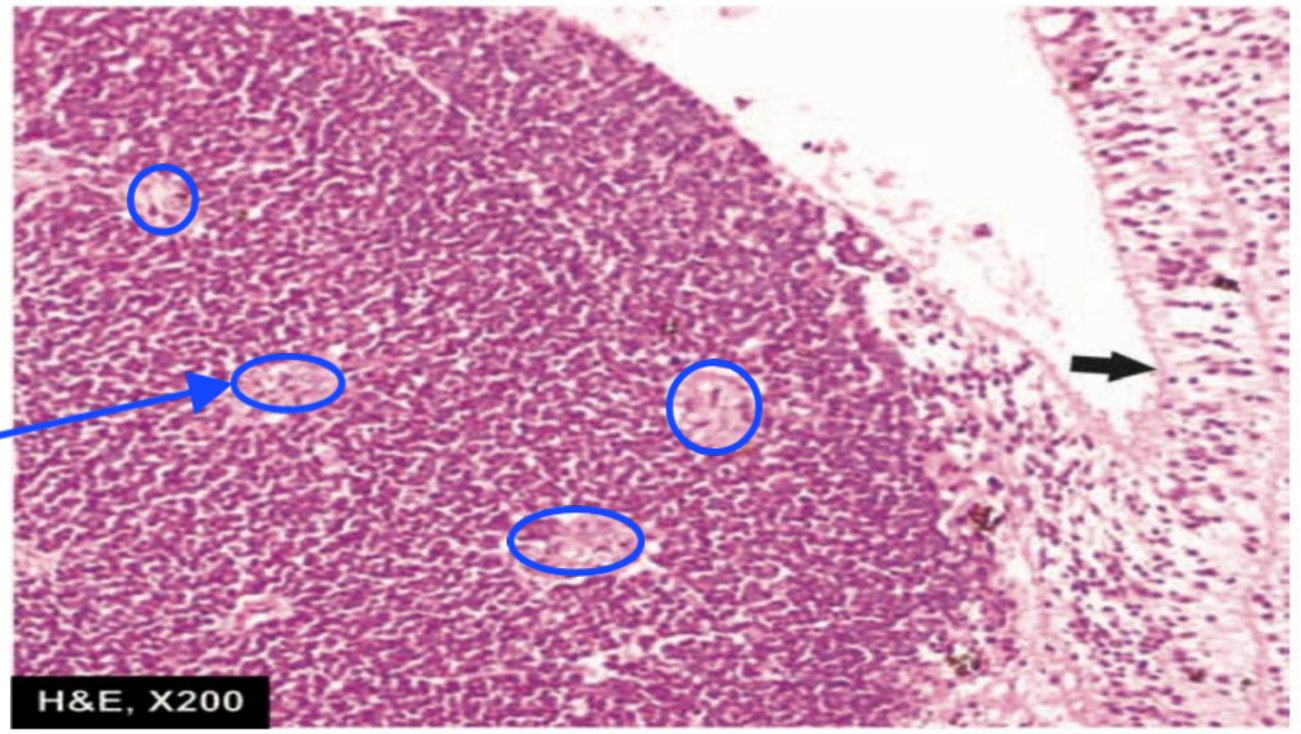
- M/E:

The tumour is composed of undifferentiated retinal cells with tendency towards formation of photo-receptor elements.

In the better differentiated area, the tumour cells are characteristically arranged in rosettes.

شكل الوردة

small, rounded cells



CHOLESTEATOMA

This is a postinflammatory ‘pseudotumour’ found in the middle ear or mastoid air cells.

There is a history of acute or chronic otitis media.

A marginal perforation is generally present through which the squamous epithelium enters the middle ear and results in exfoliation of squamous and formation of the keratin.

CHOLESTEATOMA

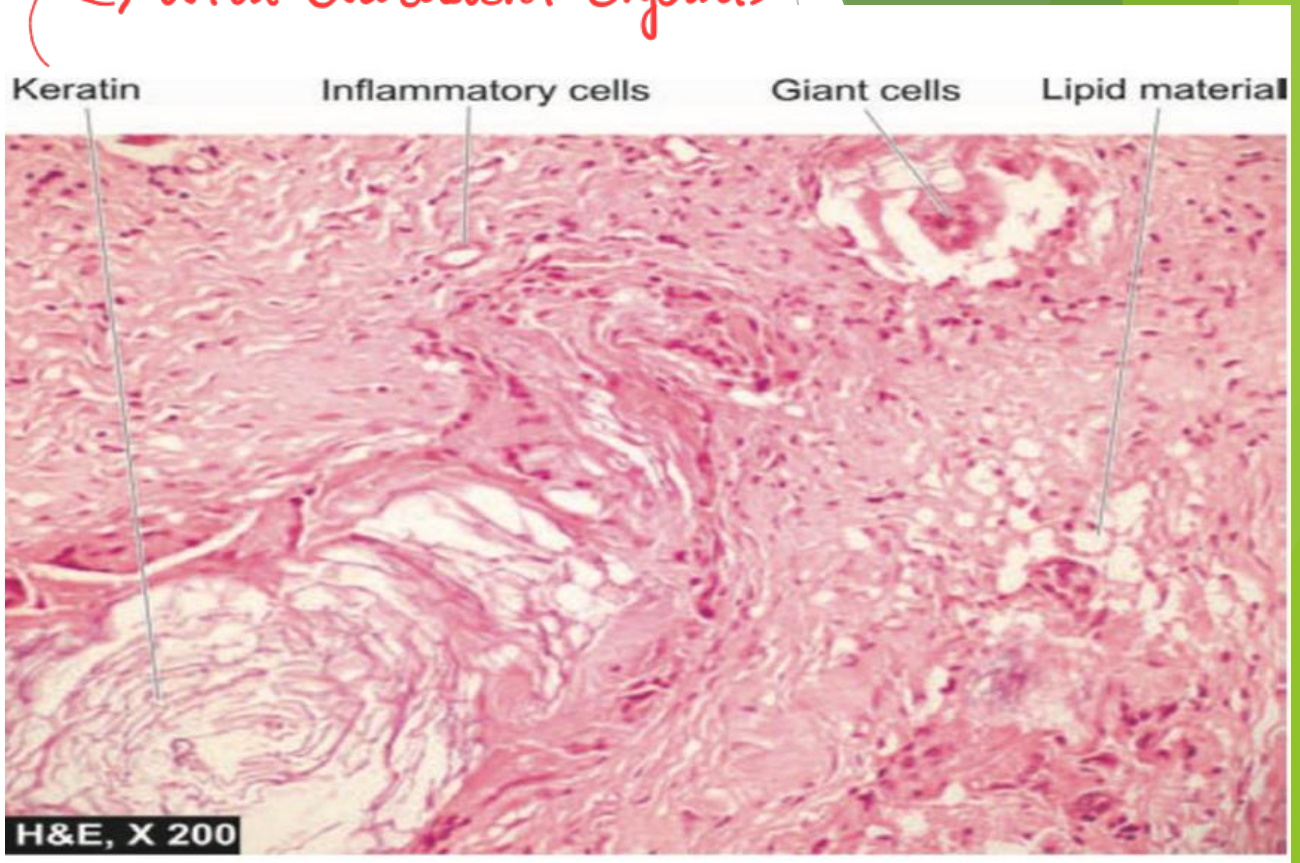
→ inflammatory lesion not a tumor

- M/E:

the lesion consists of cyst containing abundant keratin material admixed with cholesterol crystals and large number of histiocytes.

.

→ with cholesterol crystals



JUGULAR PARAGANGLIOMA

.Tumours originating from parasympathetic ganglia are called ‘paraganglioma’ and are named according to the location of the tissue of origin.

Tumor arising from glomus jugulare bodies of the middle ear (jugulotympanic bodies) is called jugular paraganglioma or chemodectoma or nonchromaffin paraganglioma and is the most common benign tumour of the middle ear.

Microscopically: the tumour cells containing neurosecretory granules are arranged in typical organoid pattern or nests.

JUGULAR PARAGANGLIOMA

- M/E: كرات الخلايا بالك للمخ

classic organoid (zellballen) or nesting pattern of paraganglioma with central round/oval cells

Containing abundant granular eosinophilic cytoplasm.

Surrounded by sutentacular cells at the periphery of Nests;

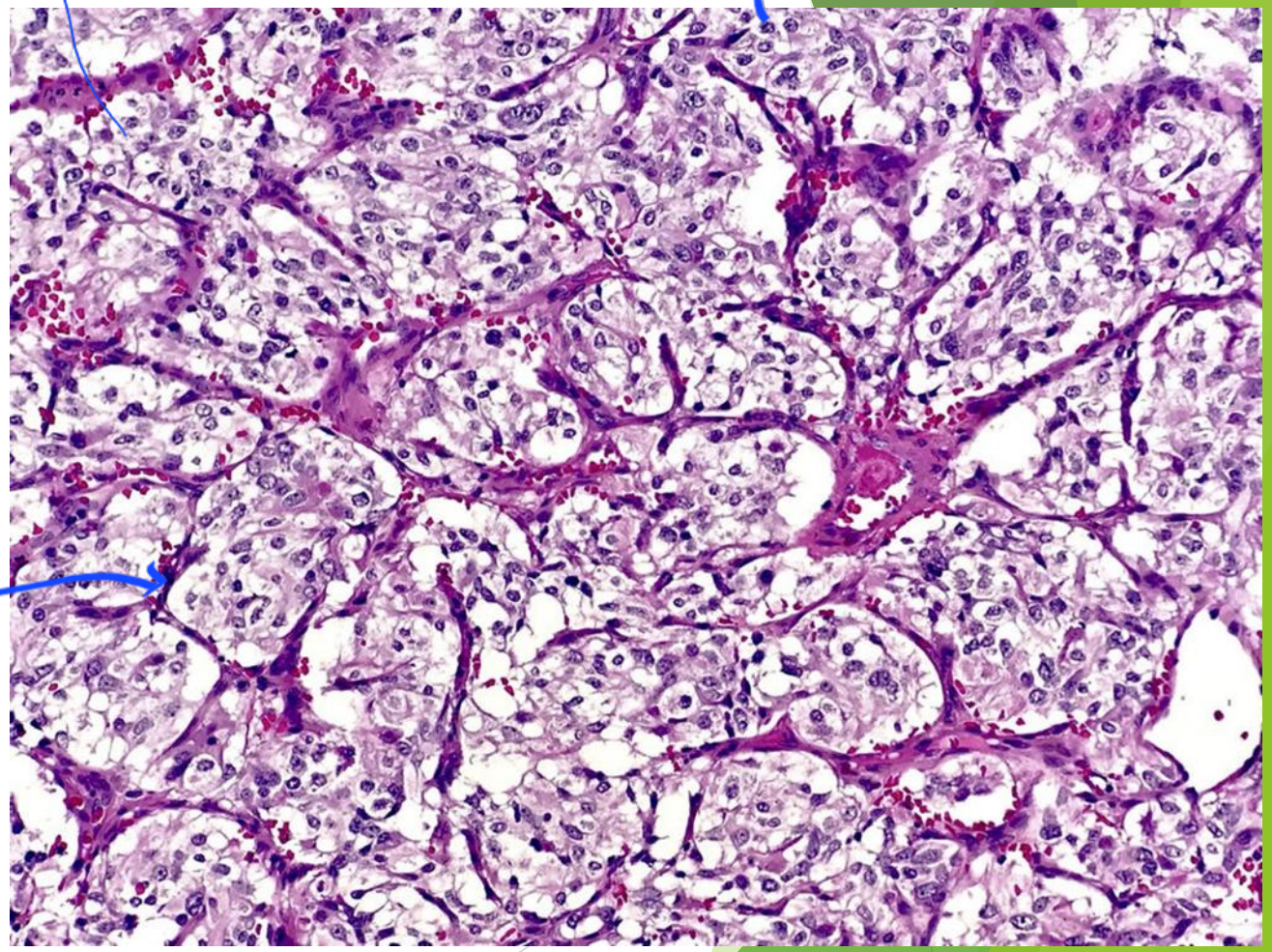
and prominnt fibrovascular stroma.

.

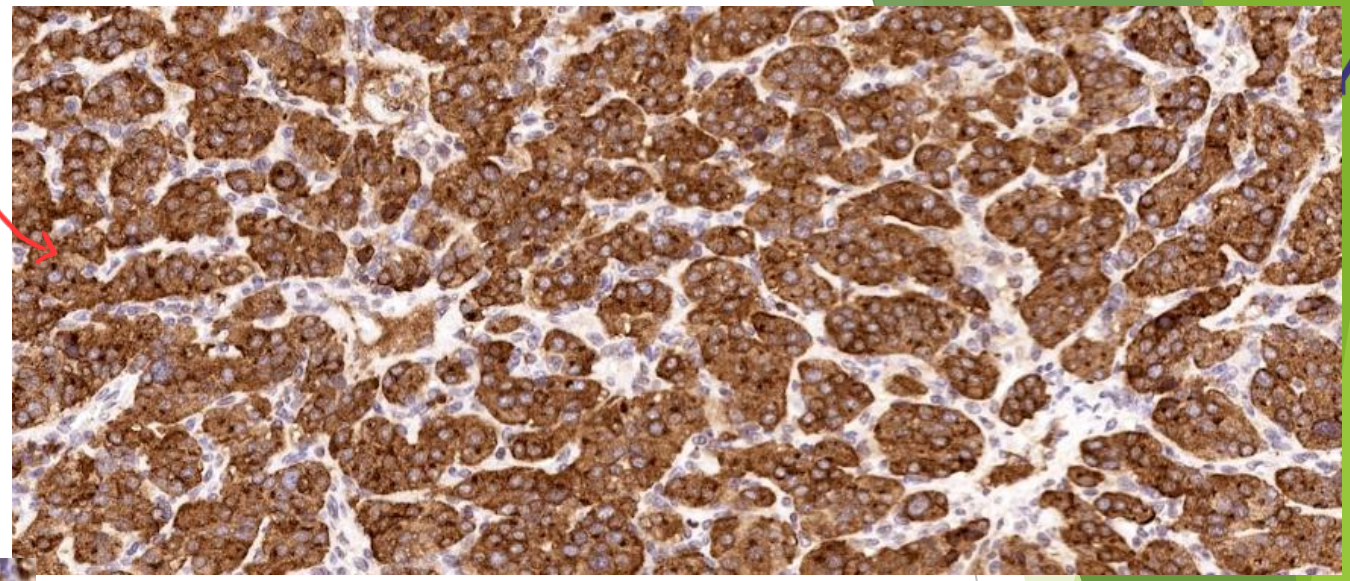
محبب

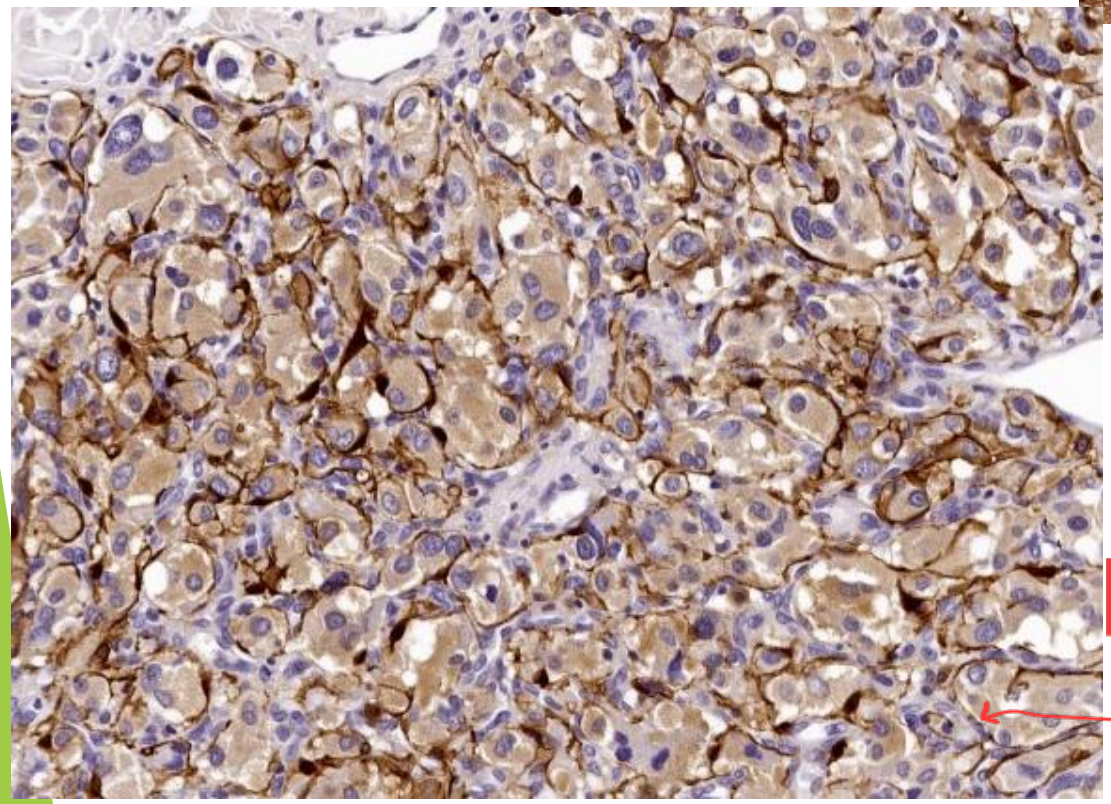
granular eosinophilic cytoplasm

rounded or oval cells



Paragangliomas have diffuse strong cytoplasmic chrmogranin positivity





S100 stains tumor cells faintly and accentuates sustentacular cells → at the periphery of the nests

THANK YOU